

Lab Certification in Nebraska

For Drinking Water Testing

Info can be found at dhhs.ne.gov/lab

Public Health Environmental Lab

The Nebraska Department of Health and Human Services Public Health Environmental Laboratory has been in business for over 100 years. It is located at 3701 South 14th Street in Lincoln, Nebraska. The laboratory employs seventeen full-time staff. Trained qualified chemists, laboratory scientists, and laboratory technicians, under supervision of a management team, perform all testing. The Public Health Environmental Laboratory is certified by the United States Environmental Protection Agency (U.S. EPA). The U.S. EPA performs on-site audits every three years.

Water Wells
Well Owner Tips in Case of Flooding

[Customer Service](#) [Pay Lab Bill / Invoice and Statement Policies](#) [Laboratory Certification](#)
[EPA](#) [Nebraska Drinking Water Watch](#)

Certified Labs 

Title 179 

Laboratory certification requirements



Required forms



Certification through reciprocity



Continued certification



Renewal



Laboratory inspections



Lab Certification Requirements

- Must use methods specified in EPA Drinking Water Regulations
- Employ both a Lab Director and Quality Assurance Officer meeting the minimum qualifications
- Maintain current administrative and analytical SOPs that follow EPA format
- Maintain a current Laboratory Quality Assurance Plan with components specified in the EPA Manual for the Certification of Laboratories Analyzing Drinking Water
- Analyze a proficiency test (PT) sample within the last 60 days with acceptable results for each method the lab is seeking certification for. PT must be purchased from an approved PT provider and the PT provider must send results directly to NPHEL Lab Certification Manager.
- Submit completed application and required documentation as indicated on the checklist.

Required forms

! Required Forms

The following forms are required forms for Laboratory Certification. You may print them and fill them out and mail them in with all other required documents. If you are unable to print these documents you can request a Laboratory Certification Packet by calling (402) 471-2122.

1. [Application for Certification of Drinking Water Testing Laboratories for Nebraska](#) 
2. [Attestation of Compliance](#) 
3. [Instructions and Checklist for Certification](#) 
4. [Personnel for Certification Matrix-Methods-Analytes](#); 
5. [Quality Assurance Manual Checklist](#) 
6. [List of Matrix, Method, and Analyte Certification Requested](#) 



Nebraska Department of Health and Human Services
**APPLICATION FOR CERTIFICATION OF DRINKING WATER
 TESTING LABORATORIES FOR NEBRASKA**

Department of Health and Human Services
 Public Health Environmental Laboratory
 3701 South 14th Street
 Lincoln, Nebraska 68502
 (402) 471-8407

Please complete all applicable parts of this form using a typewrite or computer or print in ink.
 When completed, return to the above address to the attention of the QA Manager.

Date of Request:		Date Request Received:	
Check all that apply:			
<input type="checkbox"/> Initial Certification Request			
<input type="checkbox"/> Re-certification Request			
<input type="checkbox"/> Certification through Reciprocity Request			
<input type="checkbox"/> Additional Method/Analyte Certification Request			
<input type="checkbox"/> Nebraska Conform Testing Agreement Request			
1. Name of Laboratory or Facility (as it should appear on the Certificate or Agreement):			
2. Description of Laboratory (check one):			
<input type="checkbox"/> County Health Department			
<input type="checkbox"/> Utility Laboratory			
<input type="checkbox"/> University/Academic Department			
<input type="checkbox"/> Commercial Laboratory			
<input type="checkbox"/> Other (please describe):			
3. Location of Laboratory (physical address)		Street/Route:	
		City:	State: Zip:
4. Mailing Address (if different from above)		Street / PO / Route:	
		City:	State: Zip:
5. Name of Owner:		6. Telephone Number:	
7. Name of Laboratory Director:		8. Telephone Number:	
9. Name of QA Manager:		10. Telephone Number:	
11. Hours of Operation:	12. E-mail Address:	13. Fax Number:	
14. Certification Number (if already certified):		15. EPA ID (required for PT acceptance):	
16. Primary Accrediting Authority (if requesting reciprocal certification):			
<input type="checkbox"/> Check here if you can prove you can meet the electronic data submittal requirement.			



Nebraska Department of Health and Human Services
ATTESTATION OF COMPLIANCE

I, _____ of _____
 (Laboratory Director or Quality Assurance Manager) (Laboratory Name)

Understand and acknowledge that the laboratory is required to be continually in compliance with all of the provisions and standards set forth in the State of Nebraska Title 179 Chapter 20 Laboratory Certification Requirements for Testing Drinking Water Regulations, which has been determined to be equivalent to or more stringent than requirements for the Environmental Protection Agency for Drinking Water Testing. I also understand that the laboratory will be subject to suspension, revocation, and denial of accreditation as specified therein and that the laboratory is subject to the enforcement and penalty provision as stated in the current Nebraska statutes and/or regulations and of any secondary accrediting authorities from whom I have obtained accreditation.

I further attest that all certified environmental analyses performed are done in accordance with the provisions and standards set forth in the State of Nebraska Title 179 Chapter 20 Laboratory Certification Requirements for Testing Drinking Water Regulations, which has been determined to be equivalent to or more stringent than the standards of the Environmental Protection Agency for Drinking Water Testing.

I hereby certify that I am authorized to sign this application on behalf of the owner and that there are no misrepresentations in my answers to the questions on this application. The information, statements, facts, and representations given and made are true and correct, and I am aware that any misrepresentations or falsifications constitute grounds for the imposition of penalties by law.

Signature of Quality Assurance Manager	Printed Name of Quality Assurance Manager
Printed Legal Name of Laboratory	Current Date
Signature of Laboratory Director(s)	Printed Name of Laboratory Director(s)

Please indicate, by section number and/or page number, where the following elements are found in the submitted Laboratory Quality Assurance Manual. See the Manual for the Certification of Laboratories Analyzing Drinking Water, section labeled Laboratory Quality Assurance Plan starting on page III - 4 for more information. If a particular item is not relevant, the QC plan should state this and provide a brief explanation.

Mandatory Elements	Quality Manual Reference
Title page signed and dated	
1a. Chart or table showing laboratory organization and responsibility and relationship between management and the quality system	
1b. List of key individuals responsible for production of valid results and routine assessment of the quality systems	
1c. Reference to job descriptions of staff, training provided, and documentation of staff proficiency	
2. Process used to identify clients Data Quality Objectives	
3a. List of SOP's with dates of last revisions	
3b. Where current copies of SOP's are stored	
3c. SOP's are reviewed annually and revised as changes are made	
3d. SOP's have signature pages and revisions dated	
4a. Sampling, preserving, shipping, receiving, and storage procedures	
4b. How forms are filled out and availability of hard copies of electronic data	
4c. How samples are checked on arrival	
4d. Sample Instructions are available	
5. Laboratory sample handling procedures	
5a. Sample login procedure	
5b. Storage of samples	
5c. Sample tracking process	
5d. Sample chain of custody	
5e. Sample rejection	
6. Calibration procedures for chemistry	
6a. Specify type of calibration used for each method and frequency of use	
6b. Standards source, age, storage, labeling	
6c. Perform data comparability checks	
6d. Use of control charts	
7. Analytical procedures (may reference SOP)	
7a. Cite complete method manual	
7b. Quality control procedures required by the methods that must be followed	

8. Data reduction, validation, reporting, and verification	
8a. Data reduction process	
8b. Data validation process	
8c. Reporting, including procedures and format	
8d. Data verification process	
8e. Procedure for data corrections	
9. Type of quality control checks and the frequency of use	
9a. Instrument performance check standards	
9b. Frequency and acceptability of method detection limit calculations	
9c. Calibration, internal, and surrogate standards	
9d. Laboratory reagent blank, field reagent blank, and trip blank	
9e. Field and laboratory matrix replicates	
9f. Quality control and performance evaluation samples	
9g. Laboratory fortified blank and laboratory fortified sample matrix replicates	
9h. Initial demonstration of method capability and use of control charts	
9i. Qualitative identification/confirmation of contaminants	
9j. Parameters for microbiology should include or reference:	
aa: Positive and negative controls used	
bb: Confirmation, verification of presumptive total coliform positive samples	
cc: Sterility controls	
dd: Performance evaluation and quality control samples	
10. List schedules of internal and external system and data quality audits and inter-laboratory comparisons (may reference SOP)	
11. Preventative maintenance procedures and schedules	
11a. Location of instrument manuals and schedules and documentation of routine equipment maintenance	
11b. Availability of instrument spare parts in the laboratory	
11c. List any maintenance contracts in place	
12. Corrective action contingencies	
12a. Response to obtaining unacceptable results from analysis of PT samples and from internal QC checks	
12b. Name of person(s) responsible for various corrective actions	
12c. How corrective actions taken are documented	
13. Record keeping procedures	
13a. Procedures and documentation of those procedures	
13b. Length of storage, media type (electronic or hard copy)	
13c. Security policy of electronic databases	

Helpful Manuals for the Certification Process

1. EPA - Manual for the Certification of Laboratories Analyzing Drinking Water (Criteria and Procedures Quality Assurance) [↗](#)
2. EPA - Guidance for Preparing Standard Operating Procedures (SOPs) - EPA QA/G-6 [↗](#)
3. Reporting of Sample Analytical Results from Outside Laboratories to Nebraska's Safe Drinking Water Information System (SDWIS), (pdf format [📄](#)) (rtf format [↗](#)).

Certification through reciprocity



A laboratory requesting Nebraska certification because they hold accreditation from a national accrediting body, another state that is Environmental Protection Agency certified, or Environmental Protection Agency or state certified laboratory located outside the State of Nebraska may be certified by:

1. A completed application for certification.
2. A signed Attestation of Compliance form.
3. A copy of the laboratory's certification and accreditation certificate by the State of the Laboratory's location, EPA, or NELAP authority, including the date of expiration.
4. A list of the analytes and methods you are requesting certification for.
5. Assigned copy of the laboratory's Quality Assurance Manual.
6. The most recent proficiency testing results for the method(s) and analytes(s) for which certification is requested must be sent by the proficiency testing provider.
7. Submit a copy of the laboratory's latest on-site audit report.

Continued certification



To maintain certification by the Department a laboratory shall: notify the Department in writing within 30 days of any changes to the following:

- The name and street address (not P.O. Box) of the Laboratory;
- The name of the Laboratory Director/Manager;
- The name of the Laboratory Quality Assurance Officer;
- Test methods used for certification purposes;
- Quality Assurance Plan; or
- Standard Operating Procedures; and

Document that the Laboratory has successfully analyzed a proficiency testing (PT) sample annually for each test method certification is requested. PT samples must be purchased from a National Institute of Standards and Technology approved PT provider. If the results of a PT sample is unacceptable, the laboratory should submit corrective action taken to ensure accuracy of future results. At least one PT per year must be acceptable for each test method and analyte in which certification is requested.

Renewal

The Department shall notify all primary certified laboratories and all laboratories that have entered into an agreement with the Department 60 days prior to the expiration date of the current certification or agreement that renewal is required and explain the process for renewal. It is the responsibility of laboratories that are certified by reciprocity and that have not entered into an Agreement to initiate certificate renewal.

All laboratory certifications shall be valid for a period of time not to exceed 36 months, expiring on December 31 of the third year or when reciprocal certification expires or is revoked. Certifications based upon reciprocity will be valid based on the expiration date of the certifying body's certificate.

All laboratory *agreements* shall expire each year on December 31.

Laboratory inspections

The following pertains to all laboratories located in Nebraska:

The Department shall conduct an inspection at least once every three years to determine if the laboratory is meeting the required standards for certification based on the requirements of Federal and State regulations. The Department may recognize an on-site inspection conducted by EPA or National Environmental Laboratory Accreditation Program (NELAP), provided their standards are at least as stringent as those required by State of Nebraska regulations.

The Department can conduct an inspection of a certified laboratory or a laboratory applying for certification at any time during standard working hours.

The Department shall document any deficiencies from the standards and/or note any recommendations for the laboratory within 45 working days of the inspection.

The inspected laboratory shall respond in writing to each deficiency and/or recommendation noted in the onsite inspection report with an acceptable plan of correction and completion date within 30 working days.

There will be a charge for each inspection performed:

- Bacteriological examination - \$150
- Inorganic chemical analyses - \$100
- Heavy metal analyses - \$200
- Organic chemical analyses - \$200
- Radiochemical analyses - \$200

Micro Checklist from the EPA Certification Manual is 40 pages long and covers the following areas

1. Personnel
2. Laboratory Facilities
3. Laboratory Equipment and Supplies
4. General Laboratory Practices
5. Analytical Methodology
6. Sample Collection, Handling, and Preservation
7. Quality Assurance
8. Records and Data Reporting
9. Action Response to Laboratory Results

This Is Only A Sampling Of Quality Controls Required

- Clean, climate-controlled room
- All records must be kept min of 5yrs
- Maintenance log on all equipment maintained
- Each lot of substrate tested for fluorescence & pH
- Each lot of bottles checked for sterility & fluorescence
- Each lot of Quanti-trays tested for sterility
- Monthly check on QT sealer
- Dilution water autoclaved & checked for sterility
- Reagent water tested monthly for pH, cond., HPC, residual chlorine
- Reagent water tested annually for heavy metals, F1-, NO3
- Thermometers check against NIST annually
- Balance calibrated before use / weights certified every 5yrs & calibrated every 6 months
- Incubator at $35 \pm 0.5^{\circ}\text{C}$
- Temperatures taken 2x/day, minimum of 4 hours apart
- At least 1 external proficiency test/yr. NPHEL runs external positive & negative controls with every batch.

Q. So why is all this quality control needed????

A. To prevent false positives and false negatives

False positives can incur costs for clients such as shocking a well or well remediation

False negatives can have health impacts, sometimes severe

Labs currently certified by the State of Nebraska

Name of Lab	Certification #	Address	Certified for Analytes
Central District Health Department	NE-04-01	1137 South Locust Grand Island, NE 68801	Total Coliform/E.coli by Colilert SM9223B
Enviro Services Inc.	NE-04-03	818 S. Beltline Hwy East Scottsbluff, NE 69361	Total Coliform/E.coli by Colilert SM9223B
Metropolitan Utilities Districts	NE-04-04	2710 Grebe Street Omaha, NE 68111	Total Coliform/E.coli by Colilert SM9223B
Midwest Laboratories, Inc. (by reciprocity)	NE-04-05	13611 B Street Omaha, NE 68144	Total Coliform/E.coli by Quanti-tray 2000 SM9223B Nitrate as N by EPA 300.0, Nitrite as N by SM4500-NO2-B, Copper by EPA 200.8, Lead by EPA 200.7, VOCs by EPA 524.2
American Agricultural Laboratory	NE-04-06	700 East D Street McCook, NE 69001	Total Coliform/E.coli by Colilert SM9223B Nitrate/Nitrite EPA 353.2